Amendments to the claims (this listing replaces all prior versions):

1. (Currently Amended) A machine-based method comprising:

in connection with a project in which a user generates a predictive model based on historical data about a system being modeled:

selecting variables having at least a first predetermined level of significance from a pool of potential predictor variables associated with the data, to form a first population of predictor variables,

~~extending the population of predictor variables to include non-linear interactions of variables,~~

extending the first population of predictor variables to include cross products of at least two variables, each being from the first population of predictor variables ~~linear and non-linear extensions with remaining previously excluded variables~~,

selecting variables having at least a second predetermined level of significance from the extended first population of predictor variables to form a second population of predictor variables,

extending the second population of predictor variables to include cross products of at least two variables, at least one of the variables being from the first population of predictor variables and having less than the first predetermined level of significance,

selecting variables having at least a third predetermined level of significance from the extended second population of predictor variables to form a third population of predictor variables,

automatically selecting a model generation method from ~~among~~ a set of available model generation methods to match characteristics of the historical data,

generating a possible model of the ~~extended~~ third population of predictor variables using a subsample of the historical data by the model generation method,

determining whether the possible model generalizes to the historical data other than the subsample,

applying the possible model to all of the historical data to generate a final model,

cross-validating the final model using random portions of the historical data ~~interacting with the system being modeled based on the final model~~, and

interacting with the system being modeled based on the final model.

2. (Currently Amended) The method of claim 1 also including displaying information to the user of the size of the pool of potential predictor variables.

3. (Currently Amended) The method of claim 1 also including enabling a user to point and click to reduce or extend the size of the pool of potential predictor variables, retaining only predictor variables having at least ~~a~~ the second predetermined level of significance.

4. (Previously Presented) The method of claim 1 in which the user is enabled to invoke an automatic process to select a class of models most suitable to the pool of potential predictor variables associated with the data.

5. (Currently Amended) The method of claim 1 in which the user is enabled to point and click to adjust a criterion of the model selection ~~criterion~~ to retain only variables having at least a certain level of significance for ~~the~~ a target goal.

6. (Currently Amended) The method of claim 1 in which the user is enabled to point and click to cause display of information about performance of the possible model or the final model ~~performance~~.

7. (Currently Amended) The method of claim 6 in which the information ~~about the model performance~~ includes at least one of: a statistical report card, a link to a statistical report

chart, a lift chart, a link to the lift chart, a response comparison chart for each decile for each predictor variable in the possible model or the final model, or a link to the response comparison chart.

8. (Currently Amended) The method of claim 7 in which invocation of the link to the statistical report card causes display of the statistics of ~~model~~ the performance of the possible model or the final model.

9. (Original) The method of claim 7 in which invocation of the link to the lift chart causes display of a non-cumulative lift chart.

10. (Currently Amended) The method of claim 7 in which invocation of the link to the response comparison chart causes display of a response chart for each predictor variable in the possible model or the final model for each segment of interest.

11. (Currently Amended) The method of claim 1 in which a user is enabled to choose interactively at least one performance criterion change or transformation or interaction of variables to improve a fit of the possible model or the final model.

12. (Canceled).

13. (Currently Amended) The method of claim ~~12~~ 1 in which the user is enabled to select at least one validation dataset and invoke a model process validation method.

14. (Currently Amended) The method of claim ~~12~~ 13 in which the user is enabled to point and click to cause display of information about the model process validation.

15. (Currently Amended) The method of claim ~~12~~ 14 in which the information about the model process validation includes at least one of: a statistical report card, a link to a statistical report chart, a cumulative lift chart, a link to the cumulative lift chart, a non-cumulative lift chart, a link to the non-cumulative lift chart.

16. (Original) The method of claim 1 in which the user is enabled to select at least one machine automated model development process applied to the entire dataset for a validated model process.

17. (Currently Amended) The method of claim ~~1~~ 16 in which the user is enabled to point and click to cause display of information about the performance of the validated model process applied to the entire set of historical data.

18. (Currently Amended) The method of claim 17 in which the information about the ~~model~~ performance comprises information about the performance of the validated model process applied to ~~for~~ two independent data subsets, the independent data subsets being randomly selected from the historical data[[,]], and includes at least one of: a statistical report card, a link to a statistical report chart, a cumulative lift chart, a link to the cumulative lift chart, a non-cumulative lift chart, a link to the non-cumulative lift chart.

19. (Original) The method of claim 18 in which the invocation of the link to the statistical report card causes display of the statistics of model process validation.

20-21. (Canceled).

22. (Original) The method of claim 18 in which the final model and the model process validation results are stored persistently.

23. (Currently Amended) The method of claim 1 also including enabling the user to observe the number of predictor variables available for ~~the~~ generating the predictive model.

24. (Canceled).

25. (Currently Amended) The method of claim 1 also including enabling the user to observe the performance of the possible model or the final model by means of links to a plurality of statistical and graphical reports.

26. (Currently Amended) The method of claim 1 also enabling the user to select a means of validating the selected model generation method ~~development process~~.

27. (Currently Amended) The method of claim 1 also including enabling the user to observe the performance of the possible model or the final model when applied to ~~for~~ a training subset and a validation subset of the historical data.

28. (Currently Amended) The method of claim 1 also including enabling the user to invoke at least one validated model generation method ~~development process~~ to produce a final model and enabling the user to observe ~~the~~ performance of the final model on at least two independent subsets, the independent subsets being randomly selected from the historical data.

29. (Currently Amended) The method of claim 1 also including enabling the persisting of the final model and intermediate results to a project database.

30. (Currently Amended) The method of claim 1 also including enabling the final model to be applied to scoring at least one non-historical dataset wherein the propensity computed by the model is indexed by the score.

31. (Currently Amended) A machine-based method comprising:

in connection with a project,

automatically selecting a model generation method from ~~among~~ a set of available model generation methods to match characteristics of historical data about a system being modeled,

generating a predictive model based on the historical data, and

displaying to a user a lift chart, monotonicity, and concordance scores associated with each step in a step-wise model fitting process, the concordance scores being obtained based on a receiver-operator-characteristic curve and indicating to the user goodness of fit of the historical data to the generated predictive model.

32. (Currently Amended) The method of claim 31 also including enabling the user to observe changes in the fit ~~of the model~~ as variables associated with the historical data are added or removed from a predictor set of the variables.

33. (Currently Amended) The method of claim 31 also including enabling the user to terminate the fitting ~~of the model~~ process when the fitting process reaches an optimal point.

34. (Currently Amended) A machine-based method comprising:

receiving from separate sources, sets of potential predictor and dependent variables representing historical data about a system being modeled, and

enabling a user of a model generation tool to combine at least two models based on response propensities of each model in order to create cross-modal deciles and based on data weaving to provide cross-modal optimization, the combining including concatenating the predictions of the two models ~~the dependent variables from the sets of potential predictor and dependent variables to generate a model to be used in interacting with the system being modeled~~.

35. (Currently Amended) The method of claim 34 in which enabling the user to combine the ~~variables~~ models includes providing a user interface that enables the user to identify ~~the~~ variables to be combined.

36. (Previously Presented) The method of claim 34 in which the system being modeled comprises behavior of prospective or current customers with respect to products or services of a company and the method also includes adjusting outcome variables to normalize response rates across products or services with different response rates.

37. (Previously presented) The method of claim 34 in which the system being modeled comprises behavior of current customers with respect to retention of a current service or product of a vendor and the method also includes adjusting variables to normalize response rates across products or services with different response rates, using computed propensities as indices of the scores.

38. (Currently Amended) The method of claim 34 ~~31~~ also comprising determining a course of action to yield the most positive net present value outcome.

39. (Original) The method of claim 38 in which the determining includes selection of a mix of channel and product combinations.

40. (Previously Presented) The method of claim 38 in which the determining includes predicting retention in combination with response rate to predict net present value.